



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/754,045

01/08/2004

Raman Patel

TEK-B

6070

7590 09/18/2007  
Daniel J. Hudak, Jr.  
Hudak, Shunk & Farine Co., L.P.A.  
2020 Front Street  
Cuyahoga Falls, OH 44221

EXAMINER

NUTTER, NATHAN M

ART UNIT

PAPER NUMBER

1711

MAIL DATE

DELIVERY MODE

09/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address : COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10754045	1/8/04	PATEL ET AL.	TEK-B

Daniel J. Hudak, Jr.  
Hudak, Shunk & Farine Co., L.P.A.  
2020 Front Street  
Cuyahoga Falls, OH 44221

**EXAMINER**

Nathan M.. Nutter

ART UNIT	PAPER
----------	-------

1711

20070828

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

**MAILED**

**SEP 18 2007**

**GROUP 1700**

Commissioner for Patents

Nathan M. Nutter  
Primary Examiner  
Art Unit: 1711



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/754,045  
Filing Date: January 08, 2004  
Appellant(s): PATEL ET AL.

---

Daniel J. Hudak, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 9 July 2007 appealing from the Office action mailed 31 May 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct, except for the following withdrawn grounds of rejection.

### **WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

Claims 1, 3-11 and 13-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 3-11 and 13-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1, 3-11 and 13-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3-11 and 13-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,104,210), only.

Claims 3-6, 13-20 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,141,878), only. The rejection of claims 1, 7-11, 21 and 31 under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,141,878) is being maintained.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

4,130,535	Coran et al	12-1978
4,141,878	Coran et al	02-1979

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 7-11, 21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,141,878).

The reference to Coran et al (US 4,141,878) teaches the production of a thermoplastic vulcanizate (TPV), essentially identical to that produced herein as regards composition and constitutional parameters, that may be employed with other polyolefin resins, as herein claimed. Note column 1 (line 50) to column 2 (line 44), and the paragraph bridging column 2 to column 3 for the broad concept, and the production of the TPV. Further, note column 2 (lines 38-44) for the specific particle sizes of the dispersed phase, and the compositional limitations including the recitations in claims 4, 6-8, 14, 16-18, 23, 25-27 and 29. Further, note column 5 (lines 14-46) for the rubber constituent. At column 4 (lines 19-43) the reference shows the employment of extender oils. The reference teaches the addition of conventional additives at the paragraph bridging column 5 to column 6, which would embrace flame retardants. The reference teaches broadly the employment of the resin blend composition with other thermoplastic polyolefin resins at column 6 (lines 28-40). This broad recitation would embrace homopolymers, as well as copolymers. Subsequent employment of the resin blend composition in rotational molding operations would have surely been an obvious

Art Unit: 1711

modification to an artisan as a skilled artisan would know to what uses a particular resin may be placed.

Claims 1-3, 5-7, 11-13, 15-17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,130,535).

The reference to Coran et al (US 4,130,535) teaches the production of a thermoplastic vulcanizate (TPV), essentially identical to that produced herein as regards composition and constitutional parameters, that may be employed with other polyolefin resins, as herein claimed. Note column 2 (lines 1-19) and column 2 (line 53) to column 3 (line 26) for the broad concept, and the production of the TPV. Further, note column 5 (lines 7-47) for the rubber and polyolefin constituents. At the paragraph bridging column 5 to column 6, the reference shows the employment of extender oils. The reference teaches broadly the employment of the resin blend composition with other thermoplastic polyolefin resins at column 7 (lines 41-54). Surely, this broad recitation would embrace homopolymers, as well as copolymers. Subsequent employment of the resin blend composition in rotational molding operations would have surely been an obvious modification to an artisan.

#### **(10) Response to Argument**

With regard to the rejection of the claims over Coran et al (US 4,141,878), appellants assert that the "rubber component is present in an amount from about 2 to about 60 parts per 100 parts by weight of *the matrix polymer and the thermoplastic*

***polyolefin component***. Thus, the toughened thermoplastic composition contains less than about 37.5 parts of the ***rubber component*** per 100 parts by weight of the ***rubber component of the thermoplastic elastomer component, matrix polymer of the thermoplastic elastomer component, and thermoplastic polyolefin component.***

Appellants go on to point out that Coran et al (US 4,141,878) teach “(w)hen the quantity of cross-linked CSM rubber, in the absence of plasticizer falls below about 50 parts by weight per 100 parts by weight of polyolefin resin and CSM rubber” at column 2 (lines 32-38), a rigid composition having reduced toughness is produced. The measure is of a different basis than that calculated by appellants. Further, the patent teaches the inclusion of plasticizers at column 4 (lines 36-40), and the instant claims do not exclude the use of plasticizers. The reference teaches the addition of other thermoplastic olefin resins at column 6 (lines 28-40). Appellants have ignored the fact that the reference teaches at column 1 (lines 55-60) that the amount of “about 85 to 35 parts by weight of cross-linked CSM rubber per 100 parts by weight of polyolefin resin and CSM rubber,” clearly overlaps with that recited and claimed herein. The reference teaches a broader range of constituents at column 1 (lines 28-63). The reference is viewed in its entirety. Based upon the teachings of column 2 (lines 24-28) a skilled artisan would know how to manipulate the amounts for the desired product. Appellants’ arguments with respect to claims 3-6, 13-20 and 22-30 are moot in view of the withdrawal of the rejection thereover.

With regard to the rejection of claims 1-3, 5-7, 11-13, 15-17, 21 and 22 under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,130,535), it is pointed out



that patentees do not have recognize a problem to provide a solution thereto. Further, it must be recognized that with regard to the amount of extender oil employed, the reference teaches at column 6 (lines 19 et seq) the "quantity of extender oil added depends upon the properties desired," and "the amount of extender oil depends, at least in part, upon the type of rubber." A skilled artisan would know to manipulate the amount of extender oil by these teachings. The reference says "5 to 300 parts by weight extender oil are added per 100 parts by weight blend of olefin rubber and polyolefin resin," which clearly embraces that shown herein. Appellants cannot rely on preferred embodiments to assert patentability thereover. The entirety of the reference is considered. It is pointed out that the Affidavit concerns establishing motivation of events 28 years ago. The Affidavit is given no weight in this consideration. Appellants argue "(t)here is no reason, suggestion or motivation from the prior art as a whole for the person of ordinary skill in the art to modify the references (sic) in the manner suggested by the Examiner to provide a rubber component in an amount from about 2 to about 60 parts by weight per 100 parts by weight of the **matrix polymer and thermoplastic polyolefin polymer** (or stated otherwise, in an amount to about 37.5 parts by weight per 100 parts by weight of the matrix polymer, thermoplastic polyolefin polymer component and rubber component), limiting the toughened polymer composition to less than 20 parts by weight of extender oil per 100 parts by weight of the rubber component and also limiting the toughened polymer composition to be substantially free of plasticizer." This argument is not correct since the reference says 25 weight percent rubber may be employed at column 2 (lines 1-5), which is clearly less than 37.5 weight

Art Unit: 1711

percent recited herein. Regarding Appellants' contention the "reference also cannot teach the claimed limitation wherein the toughened polymer composition has a greater impact resistance when compared to either corresponding composition wherein the rubber component is uncured, or the thermoplastic polyolefin component alone, or a combination thereof, and wherein the toughened polymer composition is substantially free of plasticizer," this would be expected from the teachings of the reference at column 6 (lines 19 et seq.). Appellants have not explained why this would not be expected, except to point to preferred embodiments. As to the temperatures employed in rotomolding techniques, nothing is recited in the claims to clearly indicate such. It is pointed out that rotomolding processes do not necessarily require the extreme temperatures proposed by appellants. The requirement would be that the resin sufficiently cover the inside layer of the mold. Depending on the resin employed, a lower temperature may be embraced. The coating of an internal mold with chocolate to produce a hollow confectionary would be tantamount to the same process, and ultra-high temperatures would be unnecessary and even detrimental to the formed object. A skilled artisan would know what techniques would be suitable for molding of the resins disclosed by the reference. Regardless, a skilled artisan would be apprised of suitable temperatures and would know to modify the molding temperatures to suit the particular resin employed and the object being molded. In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account

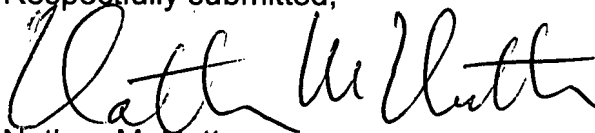
Art Unit: 1711

only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Regardless of the thrust of the Coran et al ('878) or ('535) documents, the compositional limitations disclosed therein are deemed to obviate the recitations of the instant claims, as discussed above. Further, the many methods of molding available are known to skilled artisans. Choice of any particular method depending upon factors such as desired product or materials employed or available would be clear to the artisan. With respect to the extender oil inclusion, a skilled artisan would know, as pointed out above, to limit, include or exclude oils depending on the desired products.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

Conferees:

Jennifer Michener  
Appeals Specialist



JENNIFER MICHENER  
QUALITY ASSURANCE SPECIALIST

James Seidleck  
Supervisory Patent Examiner  
Art Unit 1711

